

Notice of Allowability

Application No.

10/806,473

Examiner

Chuc D. Tran

Applicant(s)

KRICHTAFOVITCH ET AL.

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to January 25, 2007.
2. ☒ The allowed claim(s) is/are 20-46.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted:
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

THO PHAN
PRIMARY EXAMINER
Part of Paper No./Mail Date 20070323

DETAILED ACTION

Drawings

1. The drawings were received on March 23, 2004. These drawings are accepted.

Allowable Subject Matter

2. Claims 20-46 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Prior art fails to disclose or suggest in combination with the remaining claimed limitation: a spacing between each corona discharge electrode of said second array and a nearest accelerator electrode of said third array is within the range of 1.2 to 2 times a spacing between each corona discharge electrode of said first array and a nearest accelerator electrode of said third array in claim 20, claims 21 and 22 are allowed since they are dependent on claim 20.

Prior art fails to disclose or suggest in combination with the remaining claimed limitation: a forth array of accelerating electrodes disposed longitudinally in a forth plane, said forth plane being parallel to said first, second, and third planes and disposed on an opposite side of said second array than is said third plane, wherein each accelerating electrode of said forth array is disposed in a staggered orientation with respect to said corona discharge electrodes of said second array in claim 23.

Prior art fails to disclose or suggest in combination with the remaining claimed limitation: a high voltage power supply circuit coupled to said first and third arrays, wherein a high voltage waveform provided to corona discharge electrodes of said first array is synchronized with a high voltage waveform provided to corona discharge electrodes of said second array in claim 24, claims 25 and 26 are allowed since they are dependent on claim 24.

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Prior art fails to disclose or suggest in combination with the remaining claimed limitation: a second electrostatic accelerator stage having a second array of corona discharge electrodes disposed in a third plane and a second array of accelerating electrodes disposed in a forth plane, wherein each corona discharge electrode of said second array of corona discharge electrodes is disposed offset from each accelerating electrode of said first array of accelerating electrodes in claim 27, claims 28-39 are allowed since they are dependent on claim 27.

Prior art fails to disclose or suggest in combination with the remaining claimed limitation: a method for determining an inter-stage spacing to prevent a back corona forming between accelerating electrodes of a first electrostatic accelerator stage and corona discharge electrodes of a second electrostatic accelerator stage, said inter-stage spacing being within the range of 1.2 to 2.0 times said intra-stage spacing in claim 40, claims 41-46 are allowed since they are dependent on claim 40.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Inquiry

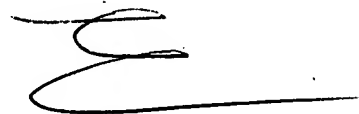
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D. Tran whose telephone number is (571) 272-1829. The examiner can normally be reached on M-F Flex hours.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TC
March 23, 2007



**THO PHAN
PRIMARY EXAMINER**